SAFETY INFORMATION

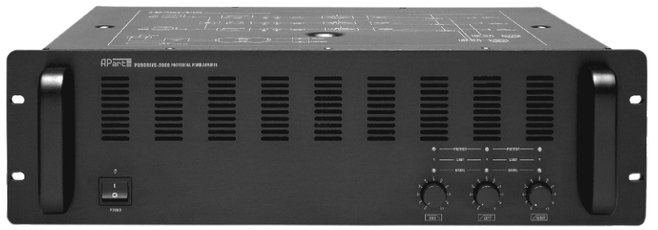
- Read all documentation before operating your equipment. Retain all documentation for future reference.
- Save the carton and packing material even if the equipment has arrived in good condition. Should you ever need to ship the unit, use only the original factory packing.
- Do not spill water or other liquids into or on the unit.
- Make sure power outlets conform to the power requirements listed on the back of the unit.
- Do not use the unit if the electrical power cord is frayed or broken.
- Always operate the unit with the AC ground wire connected to the electrical system ground.
- Have gain controls on amplifiers turned down during power-up to prevent speaker damage if there are high signal levels at the inputs.
- Do not connect the inputs / outputs of amplifiers or consoles to any other voltage source, such as a battery, mains source, or power supply, regardless of whether the amplifier or console is turned on or off.
- Power down & disconnect units from mains voltage before making connections.
- Do not use the unit near stoves, heat registers, radiators, or other heat producing devices.
- Do not block fan intake or exhaust ports. Do not operate equipment on a surface or in an environment which may distort the normal flow of air around the unit. If the unit is used in an extremely dusty or smoky environment, the unit should be periodically "blown free" of dust.
- Do not remove the cover. Removing the cover will expose you to potentially dangerous voltages.
- Do not drive the inputs with a signal level greater than that required to drive equipment to full output.
- Do not run the output of any amplifier back into another input.
- Do not ground the red output terminal, never connect a red output terminal to another red output terminal.
- In case of mal-function this device should be serviced by qualified service personnel only.

CAUTION

TO REDUCE THE RISK OF ELECTRIC SHOCK
DO NOT REMOVE COVER OR BACK
NO USER-SERVICEABLE PARTS INSIDE
SERVICING ONLY FOR QUALIFIED PERSONNEL

APart PROFESSIONAL POWER AMPLIFIER

PUBDRIVE2000



Technical specifications		PUBDRIVE2000			
		Left & Right Channel		SUB Channel	
Power Output level (Rated Power)		Continuous (Watts RMS per ch.)	Dynamic (Watts RMS per ch.)	Continuous (Watts RMS)	Dynamic (Watts RMS)
	8 Ohm	200	250	450	550
	4 Ohm	320	420	700	850
	2 Ohm	440 @ 2.6 Ohm	700	1200	1400
	1 Ohm				1700
Frequency Response (system)		(70 - 120 Hz) - 40KHz, +/-3dB		35 - 120 Hz, +/-3dB	
Damping Factor 8 Ohm, 1f=1KHz		250		300	
Intermodulation distortion (IMD)		60 Hz - 7KHz , 4:1 Half Power : <0.1%			
Totale Harmonic Distortion (THD+N)		20 Hz - 20 KHz, Half Power : <0.1%			
SN ratio (22 HZ - 22 KHz)		>100dBA			
Sensitivity (Vol. Max.)		0dB			
Input Impedance		20 KOhm / Balanced, 10KOhm / Unbalanced			
Power Consumption : 230Vac / 50Hz		Idling : 40VA Max Output Power : 2200VA Max Peak Output Power : 4000VA			
Dimensions		483 X 390 X 134 (3U) MM			
Weight		25Kg			

OWNER'S MANUAL

Introduction

Congratulations on your purchase of the Apart PUBDRIVE-2000 power amplifier. The PUBDRIVE-2000 is a complete power amplifier with signal processing unit. This means you no longer need to combine a number of electronics, the PUBDRIVE-2000 does it all!

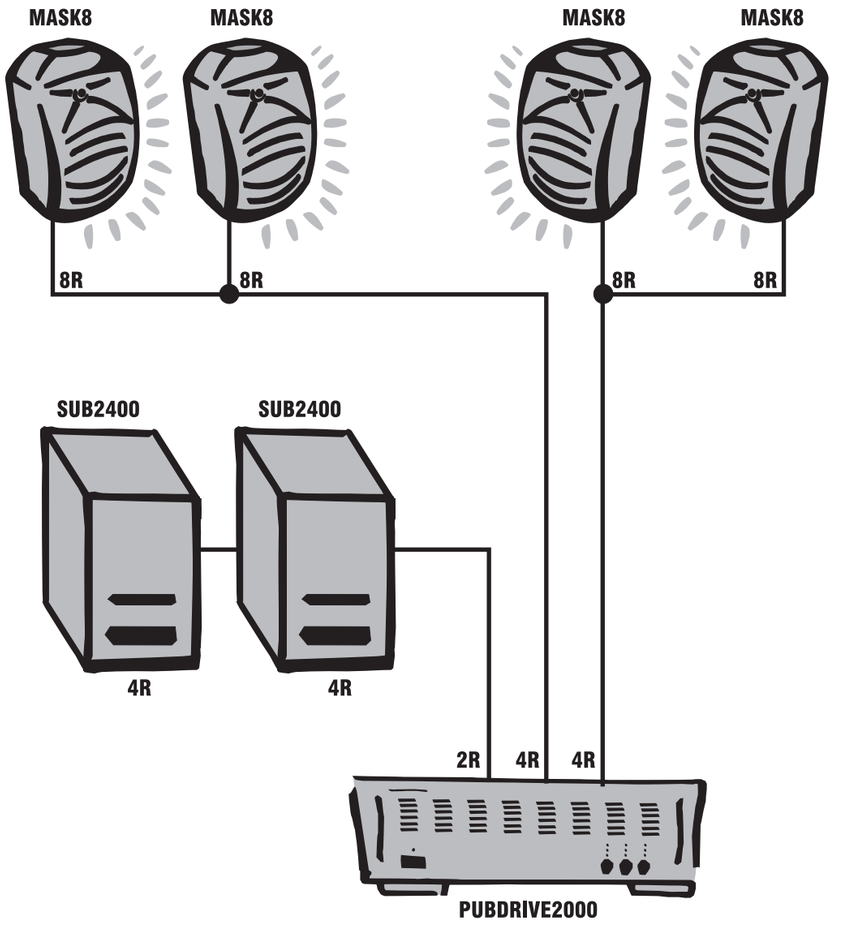
The PUBDRIVE-2000 is a 3 channel amplifier, created to drive left and right top cabinets and a subwoofer unit. The amplifier is designed for professional use. Its sturdy metal housing can easily be mounted in a 19” rack or be used as a table top amplifier.

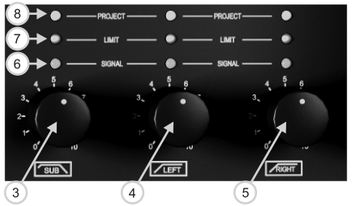
All installers features are available at the back of the amplifier. Each input has a parallel output available to link the signal to other amplifiers. The adjustable X-over point for the left and right top-channel allows the system designer to create the perfect sound synergy, no matter what set-up you are using the PUBDRIVE-2000 for.
The pre-amp out and amp-in make it possible to link the processed signal to additional power amplifiers, insert extra sound processors or just use the PUBDRIVE-2000 as a power amplifier (the X-over section is by-passed,but the volume controls and limiters are still after the AMP-IN input).

The design is based on the best components without any compromise. Huge dynamic power is always available, no matter what speakers you are driving. The left and right channel can be charged with 2.6 Ohm (= 3 cabinets of 8 ohm each channel) loads while the SUB channel accepts 2 ohm loads.
The PUBDRIVE-2000 is equipped with 2 variable speed fans (Left + right channel and SUB channel).The fans will NOT turn when the amplifier is cool or operating at low levels. The fans will turn at 50% as soon as a temperature of 50° C has been reached. When the temperature exceeds 70°C, fans will turn at full speed. The oversized power supply with extended protection circuit and soft start, together with the integrated AP-limiter® make the PUBDRIVE-2000 a fail-proof amplifier, 24 hours a day, 7 days a week!

!!!! Danger : Exposure to extremely high noise levels may cause a permanent hearing loss.
Individuals vary considerably to noise induced hearing loss but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time.
Therefore it is recommended that all persons exposed to equipment capable of inducing high sound pressure levels, such as this amplifier, be protected by hearing protectors while installing or using this unit.

PUBSET2000

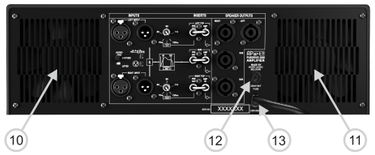


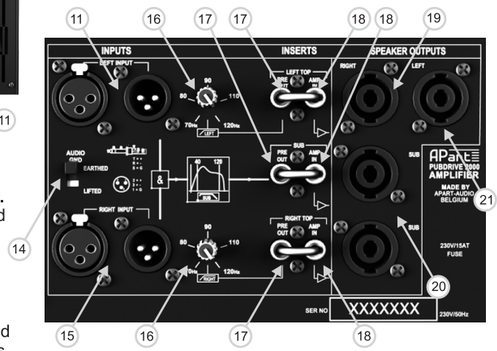


FRONT PANEL

1).Power on/off button with “soft start”. The power button supplies power to the system. Make sure all volume controls are turned down when turning on the amplifier.
2).STATUS LED: This blue LED indicates that the amplifier is plugged in to an AC outlet source and that the amplifier is turned on.
3).Volume control for SUB low frequencies.
4).Volume control left cabinets speakers.
5).Volume control right cabinets speakers.
6).SIGNAL: This signal LED indicates that an input signal is present.
7).LIMIT: This LIMIT LED indicates that the AP-Limiter® is in action.
This means that the “auto gain circuit” reduces the average level till it stays about 3dB below clipping, but still allowing dynamics within the headroom of the amplifier.
This is not a "traditional CLIP limiter", it's a "automatic gain control" that loves dynamic music and saves your speakers.
The AP-Limiter® can be bypassed by qualified personnel only.
(The LIMIT LED will keep flickering, even if the limiter has been bypassed.)
NOTE: Bypassing the AP-Limiter® will void the guarantee.
8).PROTECT: This indicator is lid when serious faults like short-circuit, overload, temperature or other trouble occurs.
This means the amplifier outputs will be muted.
In case these leds are flashing to red without muting the outputs, it indicates that your speakerload is below the limits
Please recheck your wiring and speakers impedance, or contact your dealer for further assistance.
9).Ventilation: The amplifier has a back to front airflow.
A free airflow should under all circumstances be guaranteed!

PROFESSIONAL POWER AMPLIFIER

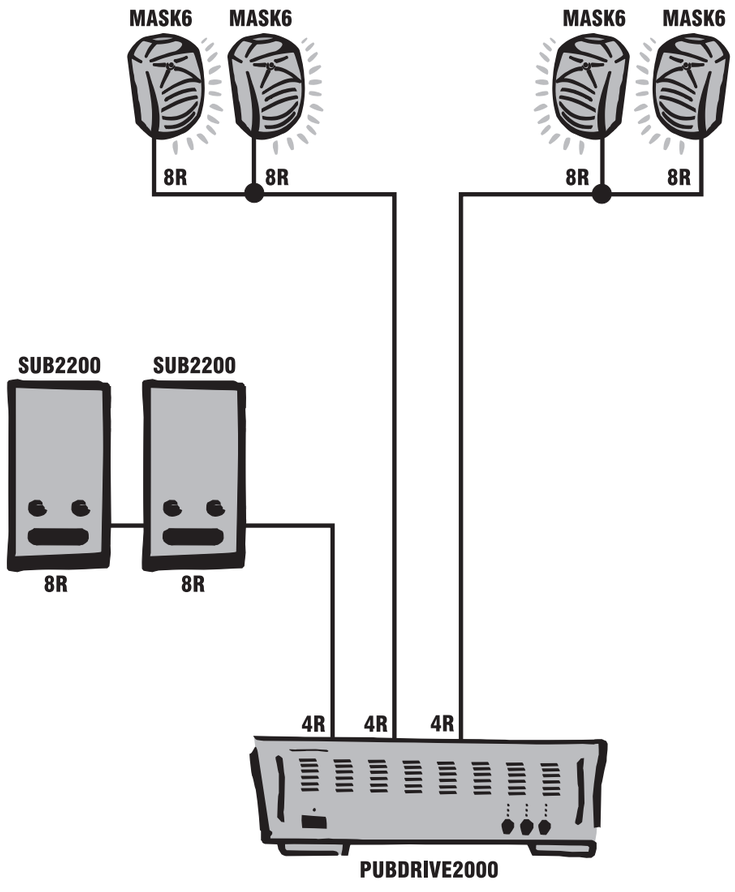




BACK PANEL

10).Fan for the SUB amplifier section.
A free airflow should always be guaranteed.
The fan will be off when the amp is cool and turns at 50% when a temperature of 50°C is reached. As soon as this temperature exceeds 70°C, the fan will turn at full speed.
11).Fan for the Left / Right amplifier section.
The fan will be off when the amp is cool and turns at 50% when a temperature of 50°C is reached. As soon as this temperature exceeds 70°C, the fan will turn at full speed
12).Fuse: the fuse shall, if needed, only be replaced by qualified personnel only.
The fuse shall only be replaced by the same type: 15 ampere slow blow fuse.
CAUTION: BE AWARE OF HIGH VOLTAGES!
13).AC POWER CORD: Always operate the unit with the AC ground wire connected to the electrical system ground. This device is suited for 220-240V use only.
14).AUDIO GROUND: When switched down, the inputs earth will be cut.
This may solve the HUM and BUZZ that occurs during installing the amplifier.
15).INPUT: The input signal connector is suited for balanced XLR connectors
The wiring can be found at the back panel of the amplifier.
Each input connector is internally wired in parallel with the male XLR connector.
This connectors can be used to link the input signal to other amplifiers or electronics.
16).X-OVER Frequency: These rotary controls allow the installer to adjust the High Pass Frequency (HPF) of the Left and Right amplifier output. (The SUB channel frequency is a fixed factory preset: 40-120 Hz). We recommend to use the 120Hz settings as a standard for 8" sized woofer top cabinets or smaller. The filter slope is 12dB/oct.
17).PRE OUT: This RCA connector is an output line signal, after the X-Over processor.
18).AMP IN: Amplifier input after the X-Over processing BUT before volume control and the AP-Limiter®.
This function allows you to use the PUBDRIVE-2000 just as a 3 channel power amplifier.
19).Right loudspeaker output on a 4-pole speakon connector. ATTENTION: the output signal is available in both -1/-2 and +1/+2. This allows you to connect two different speaker lines or a thicker cable section can be created for longer distances between amplifier and loudspeakers.
The minimum loudspeaker load should be 2.6 Ohm, meaning max 3 speakers of 8 Ohm (e.g. MASK8) in parallel, or max 6 speakers of 16 Ohm (e.g. MASK6T) in parallel.
20).SUB loudspeaker output on a 4-pole speakon connector. ATTENTION: the output signal is available in both -1/-2 and +1/+2. This allows you to connect two different speaker lines or a thicker cable section can be created for longer distances between amplifier and loudspeakers.
The minimum loudspeaker load should be 2 Ohm, meaning max 2 speakers of 4 Ohm (e.g. SUB2400) in parallel, or max 4 speakers of 8 Ohm (e.g. SUB2200) in parallel.
! Each speaker should be wired individually to the amplifier to avoid cable loss. !
21).Left loudspeaker output on a 4-pole speakon connector. ATTENTION: the output signal is available in both -1/-2 and +1/+2. This allows you to connect two different speaker lines or a thicker cable section can be created for longer distances between amplifier and loudspeakers.
The minimum loudspeaker load should be 2.6 Ohm, meaning max 3 speakers of 8 Ohm (e.g. MASK8) in parallel, or max 6 speakers of 16 Ohm (e.g. MASK6T) in parallel.

PUBSET1000



PROFESSIONAL POWER AMPLIFIER

Block diagram